

Abstract

A method for optimizing a communications network such as a wireless telecommunications network, having central switch nodes and intermediate base station transport nodes, via a non-hierarchical clustering technique is provided. At least one of the central switch nodes may be fixed in location, the remaining central switch nodes being moveable. After an initial network configuration is obtained, distances from each base station to each central switch node are calculated and the nearest central switch node to each base station is determined. Each base station is assigned to its nearest central switch node. Thereafter, the moveable central switch nodes are relocated to the location minimizing the sum of the distances between each base station assigned to the switch and the switch. The foregoing steps are repeated iteratively until a stable environment is reached in which the sum of the distances between each base station and its assigned central switch node may not be reduced via the reassignment of a base station from one switch to another.

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